

ABSTRACT OF THE DISCLOSURE

A modulation signal generation circuit performs frequency modulation of a VCO with a triangular wave for operation as an FM-CW radar. A signal processing circuit gives a modulation signal for detection generated from the modulation signal generation circuit to the VCO. A high-frequency signal subjected to frequency modulation in the VCO is transmitted as a radio wave from a transmission antenna and is reflected on a target and the reflected radio wave is received at a reception antenna. The reception signal and the high-frequency signal are mixed by a mixer to provide a beat signal and frequency shift corresponding to a voltage V_1 is detected from the frequency of the beat signal. If the voltage V_1 of the modulation signal for detection is switched, the frequency shift corresponding to different voltage V_1 can be provided and the frequency modulation characteristic can be detected.